Nonpoint Source Tracking and Monitoring Council
February 16, 2006
Meeting Minutes

Meeting Objective: *The primary objective of this TMC meeting is to provide constructive input to California's Surface Water Ambient Monitoring Program (SWAMP) concerning nonpoint source (NPS) water quality monitoring needs and activities to help address the recommendations coming from a recently conducted SWAMP program review. The Scientific Planning and Review Committee (SPARC) was convened to provide an external scientific review of SWAMP. A SPARC preliminary report contains recommendations for strengthening SWAMP, so this meeting is an opportunity for the NPS water quality community to review those recommendations and make suggestions.*

SWAMP-SPARC Presentation by Val Connor

The SPARC is an external committee composed of scientists and experts in the scientific community who conduct a triennial review of the State's SWAMP. A formal SPARC review was held in November 2005 and the SPARC proposed six recommendations to the SWAMP. SWAMP has been working to address the recommendation from the SPARC review. Attached is the Powerpoint presentation from the NPS Tracking and Monitoring Council Meeting, which includes the six recommendations from SPARC and SWAMP's responses to address those recommendations. SWAMP's responses to the SPARC recommendation will be presented at the State Water Resources Control Board (SWRCB) Workshop on March 8 and to the SPARC on March 21. Below are the questions, comments and suggestions that were brought forward in the TMC meeting. It may be helpful to refer to the attached SWAMP flow chart when reviewing the comments. Also note that the flow chart is a working document; therefore the chart will be updated to reflect the most recent changes.

Structure of the SWAMP Management Flow Chart (please refer to the charts)

1. **WQCC/SWRCB**. The Water Quality Coordinating Committee (WQCC) involves Regional Water Quality Control Board (RWQCB) and SWRCB members who set water quality priorities.
2. **MCC**. The Management Coordinating Committee (MCC) is composed of executive officers and executive staff at the State and Regional Boards. SWAMP plans to be on their agenda bimonthly to update them on their activities and obstacles. The MCC has direct decision making authority.
3. **Office of Research**. The Office of Research would report to the MCC.
4. **SWAMP Program Manager**. The Manager is in charge of SWAMP operations and alignment of the program activities between the SWRCB and RWQCBs.
5. **SPARC**. The Scientific Planning and Review Committee (SPARC) is composed of individuals from the scientific community with expertise in water quality. This Committee is in charge of conducting a triennial review of SWAMP.
6. **Monitoring Council** is a proposed external coordination body composed of high level agencies department head to develop a state framework to coordinate monitoring efforts and address water quality issues.

7. **SWAMP Roundtable** works on day to day activities; coordination of monitoring, communication, collaboration, technical transfer among RRWQCBs and SWAMP Headquarters.
8. **External Peer Review** includes technical and scientific experts from client/stakeholder groups and academia that are charged with reviewing and providing feedback on workplans and products, and also provides guidance on the implementation of studies.
9. **SWAG.** The Surface Water Advisory Group (SWAG) (ad hoc) comprised of various information uses and generators that identify state, local, and regional information priorities and conveys them to the SWAMP Roundtable.
10. **Internal Liaisons** are made up of SWAMP staff members that will work with other RWQCB and SWRCB program managers and their staff on critical decisions as new information becomes available that has policy implications.
11. **External Liaisons outside programs** can be the same individuals as the internal liaisons. These are individuals that represent other State and Federal programs.
12. **SWAMP Technical Focus groups** will be comprised of roundtable and external review participants that focus on technical issues (e.g., bioassessment, toxicity, pesticides, and etc.).

Suggestions and Comments from the NPS TMC regarding - NPS Tracking and Monitoring Council and the SWAMP Decision-Making and the Communication Documents.

<u>Questions for the NPS TMC</u>

1. How do we identify and address where all the data and programs link and work together?
2. How do we help?
3. Will this group remain or be dissolved?
4. What is the purpose of this group?
5 Should the TMC Tracking group dive into the connection between practices and water quality? Is Region 3 Ag database a pilot project to transfer?
   a. Identify clients
   b. Prioritize
   c. Take list to California Integrated Water Quality System (CIWQS)
6. What data do we need (e.g. remote sensing, surveys, surrogates etc.) and can we find ways to put these into the database.
7. How will we develop a strategy to answer the NPS monitoring questions (i.e., water quality trends)?
8. How will we integrate data/information up to state programs?

<u>Suggestions for the TMC</u>

1. SWAMP is an important program for the SWRCB to execute. SWAMP's mission is critical to SWRCB/RWQCB's. However, it does not meet the needs of the TMC, which is charged with the tracking and monitoring the implementation of the five-year NPS plan first, and then, evaluate the effectiveness of the management measures that were implemented in term of their ability to protect beneficial uses of water.

Questions for SWAMP

1. Who determines the make-up of SWAG?
2. Is the SWAMP Roundtable related to NPS Roundtable or others?
3. Decision-Structure: Is management asking for this or is it in response to the review?
4. What is the intent of the SWAMP system (data management)?
5. How broad is the SWAMP information?
6. Is CIWQS going through an evaluation assessment and review?
7. How has SWAMP worked with interagency ecological program?
8. Grant recipients and NPS general WDR hold and condition waiver holders are being required to be SWAMP compliant and submitted to the water boards. Is there a "server" at the water boards to receive this data?
9. How can clients communicate their ideas and priorities to SWAMP?
10. How can client needs drive product development?

General Suggestions/Comments

1. Decide if the data management system is proprietary or distributive.
2. SWAMP database seems too Water Boards "Centric" missing migrant bird data for example.
3. Clearly articulate that SWAMP focuses on the Clean Water Act and Porter Cologne requirements.
4. Organize data in a distributive fashion.
5. It would be nice to have inter-regional, statewide data comparability/consistency…are there some parameters that are /can be monitored statewide in all regions?

Suggestions/Comments on the Decision Making Management Document

1. There's no implementation element in the SWAMP database.
2. Identify steps that are needed to answer the question: Is water quality getting better or worse?
3. Concern about too much bureaucracy to coordinate with Interagency Ecological Program (IEP).
4. Be careful not to claim broader mission for SWAMP than can be delivered.
5. There are other assessment structures going on…how do we dovetail with e.g., SAB framework?
6. Be clear on the mission, expectations, and how SWAMP partners with other agencies and assessment processes.
    a. How SWAMP fits into other efforts and the California Environmental Data Exchange Network (CEDEN)?
7. Look at client list (not included are the following)

a. NPS Implementers
b. Watershed organizations
c. State and Federal Agencies

8. Bring implementation and effectiveness data together – SWAMP does effectiveness, NPS Program and Council need to lay the two on top of each other and tracking.
9. SWAMP is only one component of water quality data around the state.
10. Use two names for database:
    a. "SWAMP" name remain for proprietary system.
    b. New name for distribution systems.

c. Maintain SWAMP as a "proprietary system" name for the waterboards. Invent a new name for the "distribution system" that will be the home for SWAMP compliant data that will be coming in from grant recipients, general WDR holder, and conditional waivers holder.

11. Get Board Members to go the SWAMP Training.
12. Grant recipients – Does the Project Assessment and Evaluation Plan (PAEP's) require water quality data needs to be SWAMP compatible? Can SWAMP impose certain measurements? Should there be a template for data requests?
13. Add box to look at "environmental conditions". What is the role of the water quality in broader environmental conditions?
14. Inverted triangle table is 2 dimensional and doesn't take into account other agency and does not address SPARC recommendation number 5.

Suggestions/Comments on the Communication Strategy

1. Clarify what SWAMP is and what it isn't. What piece of the pie are we and how do we connect to other agencies? Let people know how SWAMP fits into the CEDEN.
2. It is a good idea to standardize formats, but how would the clients communicate back to SWAMP?
3. How about communicating to other agencies i.e. Federal?
4. How can we address CEDEN?
5. We need to communicate that there is a vision for connecting implementation and effectiveness, but it is not in place yet.
6. Targeted audiences are not addressed – need to identify clients in order to meet client needs.
7. Communication strategy should have mechanisms to communicate back to SWAMP.

Round Robin Announcements

US EPA Region 9 is soliciting proposals for a project to improve water quality monitoring and assessment in the San Joaquin River Hydrologic Region. Up to $115,000 is available for a project to develop a system for improved monitoring and assessment of water quality in the San Joaquin Region. The goal is to build a public-private partnership to produce information needed for more effective environmental management. The final product of this effort will be a San Joaquin Water Quality Regional Monitoring Strategy. Proposals are due by April 1, 2006. For details see the full announcement at: http://www.epa.gov/region9/funding/san-joaquin-06.html

Updates

Enhanced Regional Monitoring

At the last TMC meeting on October 25, 2005, the California NPS Program requested ideas for allocating funds to supporting activities aimed at enhancing regional monitoring. The total funding amount was $425,000 to support 3 – 5 projects. Seven proposals were submitted, which resulted in the three selected proposals.

- *Collaborative Regional Monitoring Program for Klamath River Basins.* The proposal is a joint effort and with the Northern Coast Regional Water Quality Control Board, the Klamath River Water Quality Monitoring Coordination Group

(co-chaired by the North Coast Board and US Fish and Wildlife Service). This project would assist in the development of infrastructure for the Klamath Basin such as: 1) establish transparent and efficient process for communication with and amongst the members of the Klamath Basin Water Quality Monitoring Coordination Group (KBWQMCG) and the general public; 2) development of a long-term monitoring plan; 3) evaluate options for and identify appropriate entity to serve as a centralized clearinghouse for the Klamath River Basin monitoring data which would provide an internet-based portal for accessing the wide range and diverse source of monitoring data in the basin; and 4) identify an assess options for establishing a sustainable institution for funding and coordinating monitoring activities, as well as synthesizing and disseminating monitoring results. The funding awarded to this project is $275,000.

- *Associating Benthic Macroinverbrate Assemblages with Agricultural and Urban Land Uses in California's Central Valley.* This project is a joint effort with Central Valley RWQCB, Department of Fish and Game (DFG), and United State's Geological Survey. The scope of work addresses two key needs for statewide and regional programs monitoring impacts of NPS land uses in California: 1) it will support development of a key biotic condition indicator for Central Valley streams and canals; and 2) will explicitly address the linkages between agriculture and urban land use intensities and the organisms living in the water bodies they affect. This project will conduct a two-year study that will include a meta-analysis of existing Central Valley datasets (benthic macroinvertebrates), identify and fill data gap with supplemental monitoring, and develop an interpretive index for stream condition assessments in the Central Valley. This index will effectively create a measuring tool that can be utilized to determine changes in stream condition associated withy agriculture and other land uses. The funding awarded to this project is $121,346.

- *California Aquatic Macroinvertebrate Laboratory Network (CAMLnet: Standardization of Freshwater Invertebrate Taxonomy to Support Biocriteria.* This project is a joint effort with the DFG Aquatic Bioassessment Laboratory and Sierra Nevada Aquatic Research Laboratory. CAMLnet was established in 1996 (sub-workgroup of the California Aquatic Bioassessment Workgroup) as a forum for sharing information among freshwater invertebrate taxonomists working on benthic macroinvertebrate (BMI) bioassessment samples. CAMLnet was formed to: 1) to support the Bioassessment procedure (CSBP), and 2) to promote standardization of California bioassessment taxonomy through training and taxonomic workshops. To date, CAMLnet has been a volunteer based organization. Since, it's beginning, CAMLnet's has grow from a few labs in California to a rapidly increasing number of labs that use the application of BMI-based bioassessment. As the use of the data is expanded (e.g. state and regional water boards, aquatic resource institutes) there is a need to establish a formalized standardization infrastructure for establishing rules regarding the organization and communication of taxonomic information (e.g., which authorities are recognized, which higher taxonomic groupings to follow, how often to update list, how to add new taxa, how to record QC data, etc.). This project will develop two key aspects of taxonomic standardization; 1) coordination with Southern California

Association of Marine Invertebrate Taxonomists (SCAMIT) to develop a formal set of standardization files for BMI taxonomy and organize CAMLnet workshop to establish a consensus-building process for ongoing standardization, and 2) creation of trial prototypes of multiple character tables for one or more test groups (e.g., Ephemeroptera: Heptageniidae, and Baetidae) and organize a taxonomic workshop for CAMLnet taxonomists to construct and validate trait table, and disseminate these tools. The funding awarded for this project is $30,000.

Website : The Tracking and Monitoring Council meeting agendas, minutes and meeting material have been posted on the SWRCB website. The website address is **http://www.waterboards.ca.gov/nps/tmc.html.**

Next Meeting: The next Tracking and Monitoring Council meeting with be either June 8 or June 15. The subject matter has not been decided, however if you have any suggestions for topics please email Sam Zielger (zielger.sam.epamail.epa.gov) or Melenee Emanuel (memanuel@waterboards.ca.gov).

California's Surface Water Ambient Monitoring Program

Response to SPARC

February 16, 2006

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

SWAMP
Surface Water
Ambient Monitoring
Program

SPARC RECOMMENDATIONS

1. Reevaluate the original program goals
2. Identify key target audiences
3. Develop and implement a programmatic communication strategy
4. Develop a statewide assessment framework
5. Take more advantage of available resources
6. Realign program management and decision making with the revised program goals

Recommendation 1.
Reevaluate Original Program Goals

- Define role of SWAMP relative to other Board programs
- Give SWAMP authority to perform this role
- Enhance state-level program direction
- Match responsibility with funding

Recommendation 2.
Identify key clients

- Identify Clients for SWAMP services
- Include mix of local and statewide perspectives
- Assess client needs
- Utilize quality assurance and data management activities to build stronger links to SWAMP

Response 2.
Client identification

- Clients/Data users
  - EPA
  - SWRCB
  - Regional Board Programs
  - Dischargers
  - Grantees
  - Environmental Groups
  - Other Agencies

Recommendation 3. Implement a communication strategy

- Develop strategy based on program goals and client needs
- Define range of signature products
- Develop schedule for routine production of products
- Look at mature programs for examples
  - Tailor the look
  - Target the audiences

Response 3.
Examples of Linking Products to Client Chains

305 (b) Water Quality Assessment

SWAMP data → GeoWBS Staff → EPA → General Public

303(d) Impaired Waters

SWAMP data → TMDL Staff → SWRCB → EPA → Regulated Dischargers, NPS Dischargers

314 Lakes Report

SWAMP data → DHS, OEHHA, EPA → General Public, Water Suppliers

30? NPDES

SWAMP data → RWQCB Permit Writers, Regulated Dischargers

Response 3. Examples of Linking Services to Client Chains

QAPP standardization

QAPP template, Expert System → State and Regional QA Officers → Grantees, Local Agencies, Volunteer Monitors

Data Management System

Data Delivery Formats → SWAMP Staff, SCCWRP, SFEI, DWR → CIWQS, EPA STORET

Assessment Tools

IBIs → SWAMP and CDFG → WQ Standards → NPDES, 305(b), 303(d), Ag Waivers

Response 3.

Signature Products and Services – QA/QC

- SWAMP Quality Assurance Management Plan
- QAPP Template
- SWAMP Advisor
- Quality Assurance Help Line

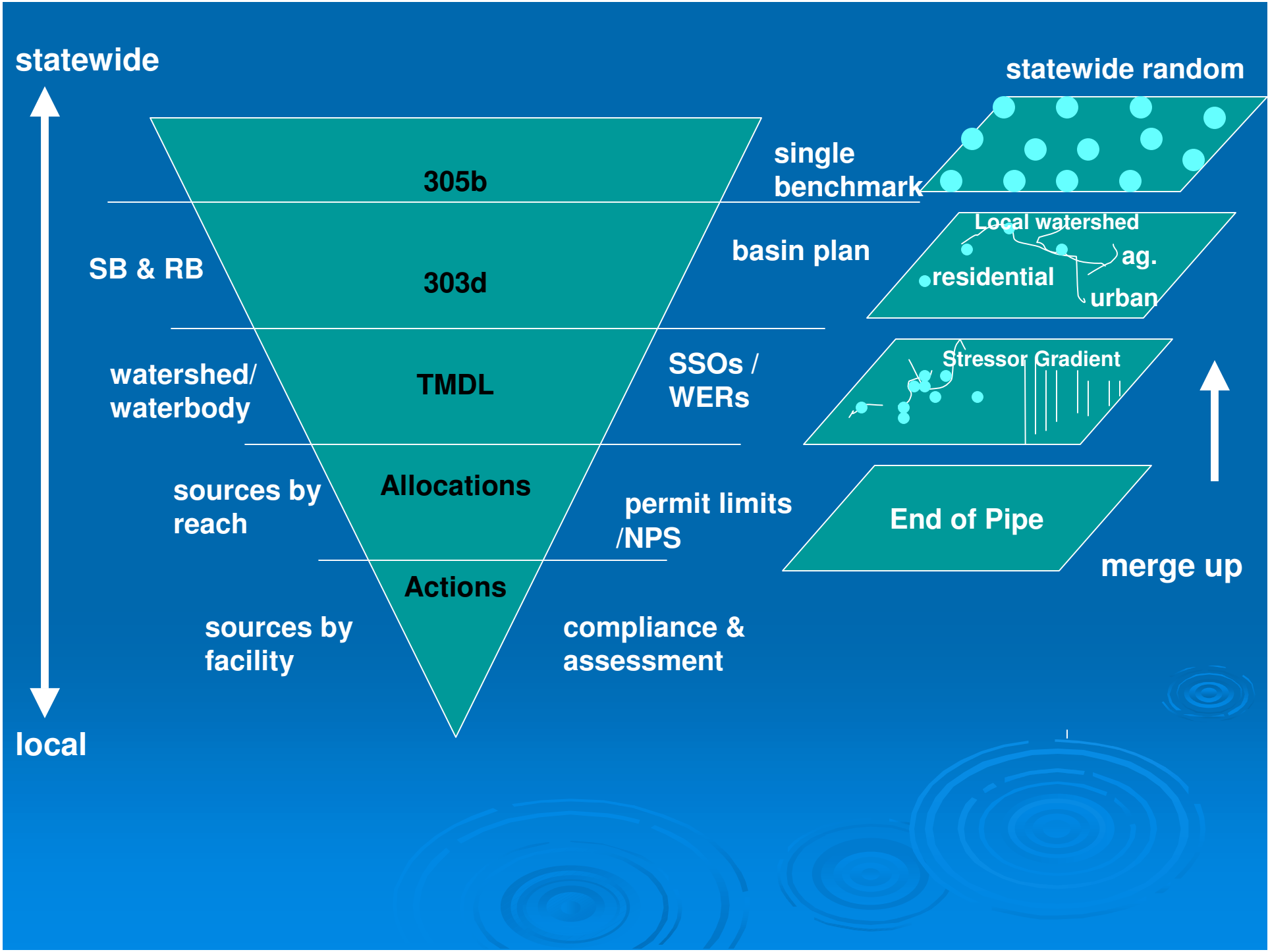
Response 3.1

Signature Products and Services – Data Management

- SWAMP Database
- SWAMP database internal/external trainings
- Web accessibility (CEDEN)
- STORET Integration
- CIWQS Integration

Recommendation 4. Develop statewide assessment framework

- Supplement monitoring taking place within regions
- Provide conceptual structure for integrating objectives, design, indicators and methods across multiple spatial scales
- Define conceptual linkages among program goals, user needs, monitoring objectives, and design
- Meet client needs
- Provide framework for prioritization (monitoring, assessment, monitoring infrastructure, tool development)
- Include budget process to define allocation of funds to priorities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SSOs /
WERs
permit limits
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compliance &
assessment
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Local watershed
residential
ag.
urban
Stressor Gradient
End of Pipe
merge up

Recommendation 5.
Take advantage of available resources

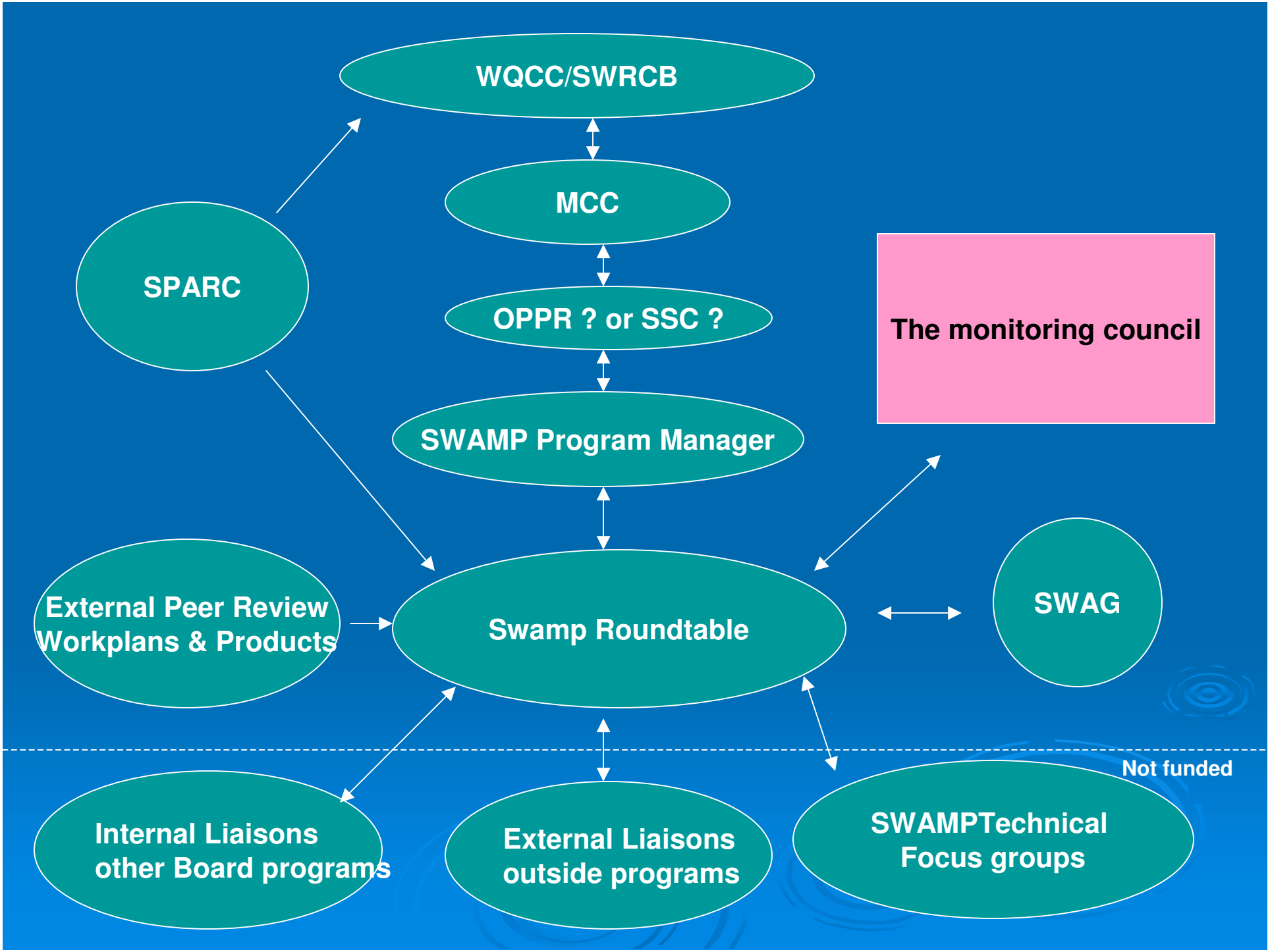
- Develop a systematic strategy at the program level for coordinating with other large monitoring efforts, particularly those driven by permits.
  - NPDES and NPDES driven regional efforts (e.g. SCCWRP, SFEI)
  - BEACH Program
  - GAMA
- Develop more consistent, stronger, and broader connections with major monitoring efforts at the local, regional and statewide level.
  - This will require a systematic strategy with clear goals
  - Ability to articulate a clear mission and set of program goals
  - Support form higher levels of the State Board management infrastructure
- SWAMP should also develop working relationship with similar programs in other states and at the federal level.
  - These programs should be mined for data, approaches, insight, and advice. Such informal sources of input should be
  - Combined with periodic formal review that can at as mechanisms for exposing SWAMP to fresh ideas and constructive criticism

Recommendation 6.
Align management and decisions with goals

- Evaluate current management structure and decision-making relative to
  - revised program goals,
  - regulatory and monitoring efforts,
  - statewide assessment strategy
- Balance the benefits of collaborative decision making among the Roundtable with mechanisms for moving forward in the absence of consensus
- Develop a systematic decision process for setting priorities.
  - Monitoring, pilot projects, indicator development, assessment
- Develop a clearinghouse to facilitate information sharing among the regions

Response 6.
Looking at management options

- Recognize that Status Quo is not an option
  - Lacking resources (time, money)
  - Lack ability to get resources
- Need to elevate status of SWAMP within Boards
  - Communicate with programs
  - Integrate and implement with programs
- Need to coordinate with other agencies

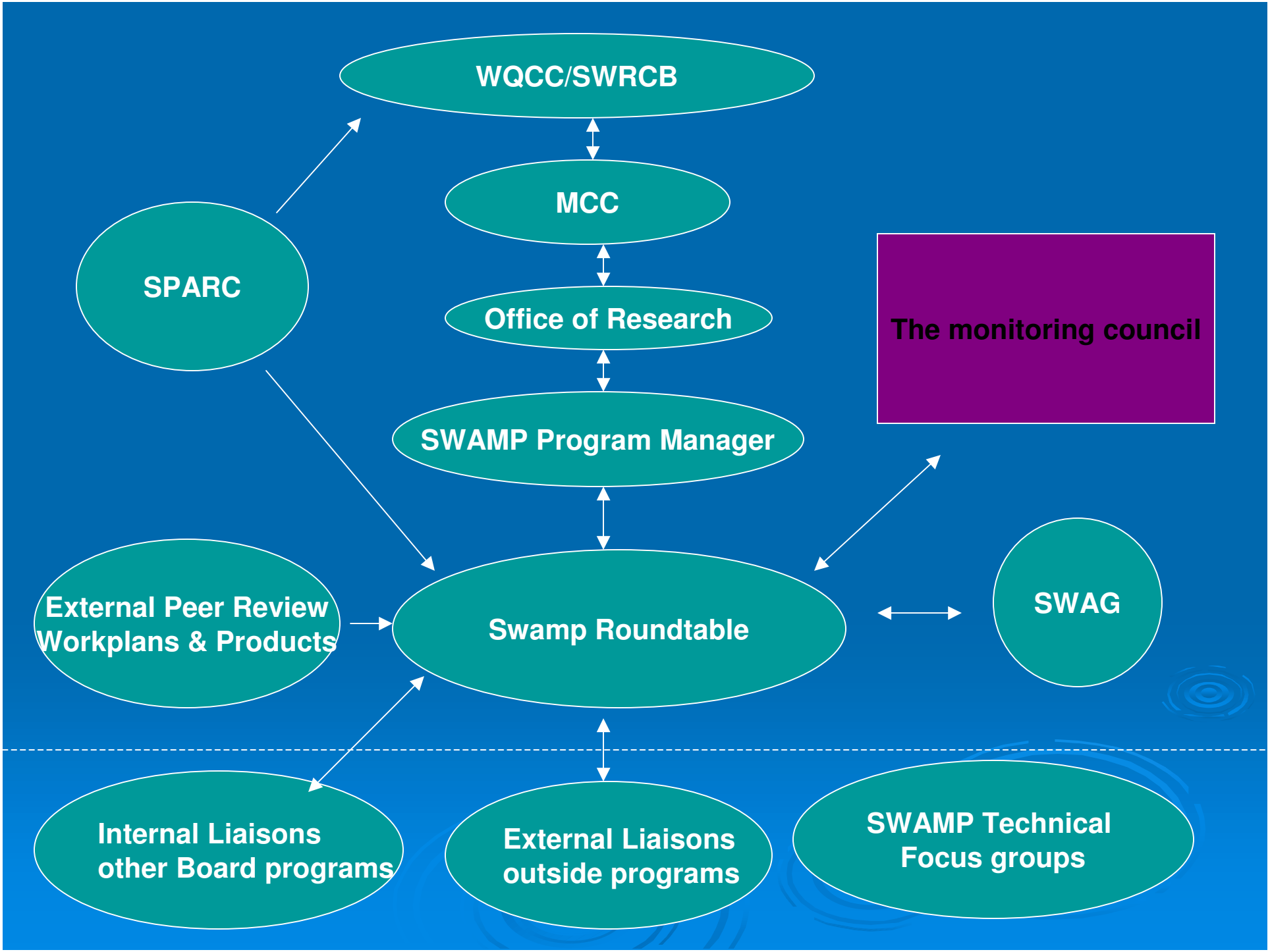

WQCC/SWRCB
MCC
SPARC
OPPR ? or SSC ?
The monitoring council
SWAMP Program Manager
External Peer Review
Workplans & Products
Swamp Roundtable
SWAG
Not funded
Internal Liaisons
other Board programs
External Liaisons
outside programs
SWAMPTechnical
Focus groups

Response 6.
Management and decision making

- Monitoring strategy is integrated into the California Performance Partnership Agreement and used in state negotiation process
- SWAMP awareness raised to level of Board and State Legislature

Implementation Strategy

- Monitoring Program Strategy (1)
- Monitoring Objectives (4)
- Monitoring Design (4)
- Core Indicators of Water Quality (2,3)
- Quality Assurance (2,3)
- Data Management (2,3)
- Data Analysis/Assessment (2,3)
- Reporting (2,3)
- Programmatic Evaluation (5,6)
- General Support and Infrastructure (5,6)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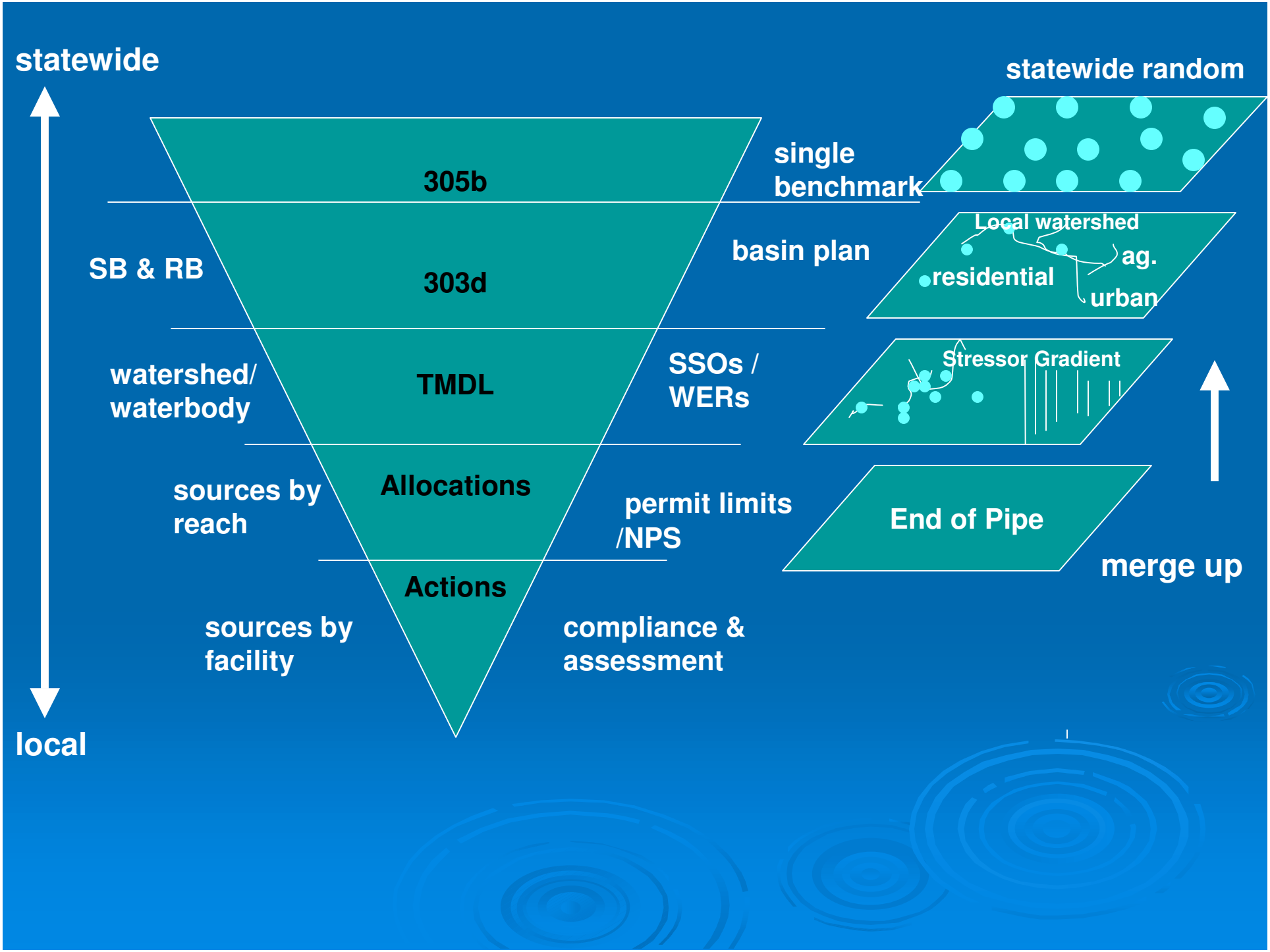
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statewide random
Local watershed
residential
ag.
urban
Stressor Gradient
End of Pipe
merge up

Attendees List for the February 16, 2006
NPS Tracking and Monitoring Council Meeting

Name	Affiliation	Email Address	Telephone Number
Ross Clark	California Coastal Commission	rclark@coastal.ca.gov	831 427-4873
Heidi Hall	State Water Resources Control Board, NPS	hhall@waterboards.ca.gov	916 323-2871
Barbara Todd	California Department of Food and Agriculture	btodd@cdfa.ca.gov	916 653-3928
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Lisa Holm	California Bay Delta Authority	lisah@calwater.ca.gov	916 445-0782
Val Connor	State Water Resources Control Board, SWAMP	vconnor@waterboards.ca.gov	916 341-5573
Sam Ziegler	Environmental Protection Agency, Region 9	Ziegler.sam@epa.gov	415 972-3399
Holly Grover	Regional Water Board, 5	hgrover@waterboards.ca.gov	916 464-4747
Karen Taberski	Regional Water Boards, 2	ktaberski@waterboards.ca.gov	510 622-2424
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Steve Fagundes	State Water Resources Control Board, NPS	sfagundes@waterboards.ca.gov	916 341-5487
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Jeff Loux	UC, Davis	jdloux@ucdavis.edu	530 757-8577
Donna Meyers	NOAA/National Marine Sanctuary Program	Donna.Meyers@noaa.gov	831 420-1609
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Tom Suk	Lahontan RWQCB	tsuk@waterboards.ca.gov	530 542-5419
Michael August	Department of Parks and Recreation	maugu@parks.ca.gov	916 653-9962
Sam Harader	CBDA	sharader@clawater.ca.gov	916 445-5466
Stefan Lorenzato	DWR	stefanl@water.ca.gov	916 651-9617

Called In

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